

(12) INTERNATIONAL APPLICATION PUBLISHED UNDER THE PATENT COOPERATION TREATY (PCT)

(19) World Intellectual Property  
Organization  
International Bureau



(43) International Publication Date  
15 April 2004 (15.04.2004)

PCT

(10) International Publication Number  
**WO 2004/030935 A3**

(51) International Patent Classification<sup>7</sup>: **B41M 1/34**,  
B32B 17/10, B44C 1/17, 3/00

(21) International Application Number:  
PCT/GB2003/004216

(22) International Filing Date:  
29 September 2003 (29.09.2003)

(25) Filing Language: English

(26) Publication Language: English

(30) Priority Data:  
0222765.0 2 October 2002 (02.10.2002) GB

(71) Applicant (for all designated States except US): **CON-  
TRA VISION LIMITED** [GB/GB]; 37B Bramhall Lane  
South, Bramhall, Stockport, Cheshire SK7 2DU (GB).

(72) Inventors; and

(75) Inventors/Applicants (for US only): **HILL, George,  
Roland** [GB/GB]; 14 Pownall Avenue, Bramhall, Stock-  
port, Cheshire SK7 2HE (GB). **QUINN, Howard**  
[GB/GB]; Brookfield, St. Anne's Vale, Brown Edge,  
Stoke-on-Trent, Staffordshire ST6 8TA (GB).

(74) Agents: **GOODWIN, Mark** et al.; Wilson Gunn M' Caw,  
41-51 Royal Exchange, Cross Street, Royal Exchange,  
Manchester M2 7BD (GB).

(81) Designated States (*national*): AE, AG, AL, AM, AT, AU,  
AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU,  
CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH,  
GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC,  
LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW,  
MX, MZ, NO, NZ, OM, PH, PL, PT, RO, RU, SD, SE, SG,  
SK, SL, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC,  
VN, YU, ZA, ZM, ZW.

(84) Designated States (*regional*): ARIPO patent (GH, GM,  
KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW),  
Eurasian patent (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM),  
European patent (AT, BE, BG, CH, CY, CZ, DE, DK, EE,  
ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO,  
SE, SI, SK, TR), OAPI patent (BF, BJ, CF, CG, CI, CM,  
GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG).

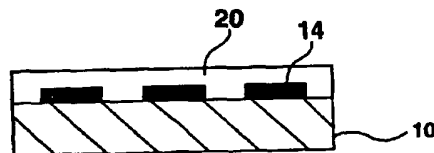
**Published:**

- with international search report
- before the expiration of the time limit for amending the  
claims and to be republished in the event of receipt of  
amendments

(88) Date of publication of the international search report:  
10 June 2004

For two-letter codes and other abbreviations, refer to the "Guid-  
ance Notes on Codes and Abbreviations" appearing at the begin-  
ning of each regular issue of the PCT Gazette.

(54) Title: GLASS PANELS PARTIALLY PRINTED WITH CERAMIC INK LAYERS IN SUBSTANTIALLY EXACT REGIS-  
TRATION



(57) **Abstract:** The present application relates to a method of making a glass panel that is partially printed with a plurality of layers in the form of a print pattern which subdivides the panel into a plurality of discrete printed areas and/or a plurality of discrete unprinted areas, said layers being in substantially exact registration. The substantially exact registration is achieved by the application to a sheet of glass (10) of a plurality of superimposed layers (14, 20), one of the layers containing a ceramic ink comprising glass frit, in a print pattern. The sheet of glass and plurality of layers applied thereto are subjected to a heat treatment process which causes the glass frit to fuse to the glass and bind at least one layer of ink within the print pattern. Any ink not within the print pattern is burnt off and/or vaporised during the heat treatment process and/or removed by a subsequent finishing process, to leave the desired layers in substantially exact registration within the print pattern.

WO 2004/030935 A3